

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (original) A waste water extraction system for an aquaculture receptacle having a side wall and a bottom wall, said receptacle filled with water to a particular water level, said system including at least:

a first conduit having first and second ends;

a second conduit disposed inside said first conduit, said second conduit having first and second ends;

a plate extending transversely across and sealing said first end of said first conduit and extending laterally of said first conduit, said plate provided with an axial hole in fluid communication with said first end of said second conduit, and said first end of said first conduit provided with at least one aperture near said plate; and,

spacer means on a surface of said plate opposite said first conduit for spacing said plate from said bottom wall;

said first and second conduits configured to exit said tank at a location at least partially below said pre-determined water level.

2. (original) The waste water extraction system according to claim 1 including a sleeve extending about a length of said first conduit to define a region between an inside surface of said sleeve and an outside surface of said length of said first conduit, said sleeve having a first end above said at least one aperture and a second end above said first end of said sleeve; and,

means for delivering a gas through said region.

3. (original) The waste water extraction system according to claim 2 wherein said means for delivering a gas includes a distributor at said first end of said sleeve for distributing said gas to flow from near said first end of said sleeve about said first conduit.
4. (previously presented) The waste water extraction system according to claim 3 wherein said first conduit includes an opening between its first and second ends, said opening disposed above said pre-determined level.
5. (previously presented) The waste water extraction system according to claim 4 wherein each of said first and second conduits include a first length that contains the respective first ends of said conduits, and extends generally vertically; and,
a second length that extends generally horizontally, said second length disposed at least partially below said pre-determined level.
6. (previously presented) An aquaculture system including:
a receptacle for holding a volume of water, said receptacle having a side wall and a bottom wall;
a water inlet through which water is delivered to said receptacle, said inlet configured to induce a circular flow of water within said receptacle;
a first conduit having first and second ends;
a second conduit disposed inside said first conduit, said second conduit having first and second ends;
a plate extending transversely across and sealing said first end of said first conduit and extending laterally of said first conduit, said plate provided with an axial hole in fluid communication with said first end of said second conduit, and said first end of said first conduit provided with at least one aperture near said plate; and,
spacer means on a surface of said plate opposite said first conduit for spacing said plate from said bottom wall;

said first and second conduits configured to exit said tank at a location at least partially below said pre-determined water level.

7. (previously presented) A system according to claim 1 wherein said first and second conduits are arranged to enable lifting of said plate from said bottom wall of said tank.

8. (new) A waste water extraction system for an aquaculture receptacle having a side wall and a bottom wall, said receptacle filled with water to a particular water level, said system comprising:

a first conduit having first and second ends;

a second conduit disposed inside said first conduit, said second conduit having first and second ends, a flow chamber being defined between said first and second conduits through which water flows;

a plate extending transversely across and sealing said first end of said first conduit and extending laterally of said first conduit, said plate provided with an axial hole in fluid communication with said first end of said second conduit, and said first end of said first conduit provided with at least one aperture near said plate;

at least one spacer disposed on a surface of said plate opposite said first conduit for spacing said plate from said bottom wall;

said first and second conduits being configured to exit said tank at a location at least partially below said pre-determined water level.

9. (new) A waste water extraction system according to claim 8 comprising a sleeve extending about a length of said first conduit to define a region between an inside surface of said sleeve and an outside surface of said length of said first conduit, said sleeve having a first end above said at least one aperture and a second end above said first end of said sleeve; and,

means for delivering a gas through said region.

10. (new) The waste water extraction system according to claim 9 wherein said means for delivering a gas includes a distributor at said first end of said sleeve for distributing said gas to flow from near said first end of said sleeve about said first conduit.

11. (new) The waste water extraction system according to claim 10 wherein said first conduit includes an opening between its first and second ends, said opening disposed above said pre-determined level.

12. (new) The waste water extraction system according to claim 11 wherein each of said first and second conduits include a first length that contains the respective first ends of said conduits, and extends generally vertically; and,
a second length that extends generally horizontally, said second length disposed at least partially below said pre-determined level.

13. (new) An aquaculture system comprising:
a receptacle for holding a volume of water, said receptacle having a side wall and a bottom wall;

a water inlet through which water is delivered to said receptacle, said inlet configured to induce a circular flow of water within said receptacle;

a first conduit having first and second ends;

a second conduit disposed inside said first conduit, said second conduit having first and second ends, a flow chamber being defined between said first and second conduits through which water flows;

a plate extending transversely across and sealing said first end of said first conduit and extending laterally of said first conduit, said plate provided with an axial hole in fluid communication with said first end of said second conduit, and said first end of said first conduit provided with at least one aperture near said plate; and,

at least one spacer disposed on a surface of said plate opposite said first conduit for spacing said plate from said bottom wall;

said first and second conduits being configured to exit said tank at a location at least partially below said pre-determined water level.

14. (new) A system according to claim 8 wherein said first and second conduits are arranged to enable lifting of said plate from said bottom wall of said tank.

15. (new) A method of extracting waste water from an aquaculture receptacle having a side wall and a bottom wall, said receptacle filled with water to a particular water level, said method comprising:

providing a first conduit having first and second ends;

providing a second conduit inside said first conduit to form a flow chamber therebetween, said second conduit having first and second ends;

providing a plate extending transversely across and sealing said first end of said first conduit and extending laterally of said first conduit;

forming an axial hole in said plate and in fluid communication with said first end of said second conduit;

forming at least one aperture in said first end of said first conduit near said plate;

spacing a surface of said plate opposite said first conduit from said bottom wall;

disposing first and second conduits to exit said tank at a location at least partially below said pre-determined water level; and,

pumping water to said receptacle,

wherein water is continually pumped into said receptacle while maintaining said pre-determined water level wherein water is drawn from above the plate through the apertures in said first conduit into said flow chamber thereby creating a general upflow of water.

16. (new) The method of claim 15 further comprising generating a circular flow of water in the receptacle about said first conduit.